DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-005967 Address: 333 Burma Road

Date Inspected: 24-Mar-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Location: Shanghai, China

CWI Name: Li Yan Hua **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** OBG Assembly

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector was present during the times noted above for observations relative to the work being performed.

Blast Shop

Segment 4AE

This QA Inspector performed a preliminary random visual inspection after the grit blast of the internal components of the bottom and side plates. Areas of visual indications that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel have been made aware of these defects but were not were present at the time of inspection.

During the preliminary random visual inspection after the grit blast of the internal components of Segment 4AE, Caltrans Quality Assurance (QA) Inspector visually detected a total of two (2) linear indications ranging from 15 to 30mm in length. These welds have been visually (VT) and Magnetic Particle (MT) tested by ZPMC Quality Control personnel. The weld designations are as follows; SSD20A-PP25-003 and DP032-001-060. See incident report for this date.

Segment Repair Yard (North of the paint shop)

Segment 1BE

This QA Inspector observed the following work in progress:

Flux Cored Arc Welding (FCAW) in the 3G position of the deck panel diaphragm to floor beam web to bottom I-rib stiffener. The welder is identified as #066683. The weld designation is SSD47A-PP11-049. ZPMC QC is

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identified as Mr. Li Yan Hua. The welding variables recorded by QC appear to comply with the applicable WPS.

Flux Cored Arc Welding (FCAW) in the 1G position of the floor beam flange to longitudinal diaphragm splice. The welder is identified as #066683. The weld designation is SSD45A-PP11.5-127. ZPMC QC is identified as Mr. Li Yan Hua. The welding variables recorded by QC appear to comply with the applicable WPS.

Segment 4BE

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) in the 4G position of the FL-3 Floor beam penetration through the edge plate. The welder is identified as #045133. The weld designation is SEG20A-033. ZPMC QC is identified as Mr. Li Yan Hua. The welding variables recorded by QC appear to comply with the applicable WPS.

Segment Repair Yard (South of the paint shop)

Segment 5BW

This QA inspector visually observed the results of the preproduction stud welding test for the counterweight studs on segment 5AW. The flash on the studs did not exhibit 360° as per D1.5 Section 7.7.1.3. ZPMC and ABF quality control (QC) personnel accepted the preproduction stud welding test and proceeded to weld the studs. This QA inspector was not present at the time of the test. See incident report on this date.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant conversations





Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (15000422372), who represents the Office of Structural Materials for your project.

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Inspected By:	Patterson, Rodney	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer